Revised 09/09

GEOL 1020 Earth History (3-0-3)

Course Maximum Enrollment: 24

Special Facility or Equipment Needs/Safety Rules and Issues: Room with facilities for lecture/demonstration with multimedia capabilities; student desks.

Lab Fee: None

Course Description: History and development of the earth and life studied through fossils and rocks.

Pre-and Co-requisites: Eligibility for ENGL 1010, Grade of "C" or better in GEOL1010.

Text and Readings: The Changing Earth, by Wicander & Monroe. Thomson Brooks/Cole Publishing, 2006.

Course Goal: This course is intended as an introduction to the geological and biological history of the Earth. The goals of the course include (1) the application of scientific principles to the study of the earth and the physical and biological processes which have shaped it; (2) the examination of the role of plate tectonics on the history of the earth; (3) the examination of the continuum of interrelated physical and biological changes which have occurred and continue to shape the earth; and (4) the examination of man's relationship with the earth processes.

Course Objectives:

The student will be able to:

- identify the physical and biological processes that shape the earth and apply this knowledge to different hypothetical situations.
- explain the tehcniques of absolute ate dating and relative age dating, and utilize these techniques in the study of the Earth.
- analyze the fossil record and apply the principal of organic evolution to the fossil record.
- explain the unifying theory of plate tectonics as it applies to physical and biological processes of the earth.
- apply past biological and physical occurrences to the present environment, and **Course Content**:

Week 1: Introduction and administration of the course requirements, The rock cycle, Plate tectonics

Week 2: Geologic time, Absolute and relative age dating, Introduction to Stratigraphy

Week 3: Organic evolution, The fossil record

Week 4: Examination 1, Origin of the universe, solar system, and planets

Week 5: Precambrian Earth, The origin of life

Week 6: Examination 2, Paleozoic Earth history

Week 7: Paleozoic Earth history cont., Paleozoic life history

Week 8: Paleozoic life history cont.

Week 9: Examination 3, Mesozoic Earth history

Week 10: Mesozoic Earth history cont., Mesozoic life history

Week 11: Mesozoic life history cont.

Week 12: Examination 4, Cenozoic Earth history

Week 13: Cenozoic Earth history cont., Cenozoic life history

Week 14: Cenozoic life history cont., Primate evolution

Week 15: Man and the environment

Week 16: Final Comprehensive Examination

Assessment:

Examinations (3)	300 points
Final Examination	200 points
Research papers and/ or mini projects	* 300 points
Quizzes	100 points
	900 points

Reading and Writing Across the Curriculum: The reading and writing components of these aforementioned assessments satisfies the Reading and Writing Across the Curriculum requirement as stipulated in SLCC's academic policy.

Grading and Absence Policy:

90 - 100% = A

80 - 89% = B.

70 - 79% = C

60 - 69% = D

0 - 59% = F

Students are expected to attend all classes; missing greater than 10% may result in failing the course. Forewarning of absence is a courtesy. Make-up examinations will be given only to those persons having a legitimate excuse with appropriate documentation from a doctor or dean. It is the discretion of the instructor to accept an excuse.

It is the responsibility of the student to arrange with the instructor in advance for make-up examination.

Students with Disabilities: Students with a disability requiring assistance or accommodation, such as for testing, note takers, readers, etc., should contact the instructor as soon as possible. Students may also contact the dean of Students with questions about such services.

Emergency Evacuation Procedure: A map of this floor is posted in the front of this building. The map marks the evacuation route and the Designated Rescue Area. This area is where emergency service personnel will go first to look for individuals who need assistance in exiting the building. Students who may need assistance should identify themselves to the teaching faculty.